

ST. BARTHOLOMEW'S



HOSPITAL JOURNAL

WAR EDITION

Vol. 2

JANUARY 1st, 1941.

No. 4.

"OUR UNUSED INFLUENCE"

THE Medical Profession comes in for a great deal of criticism, and forfeits the confidence of such people even as H.B.M.'s late Ambassador in Washington (perhaps to their ultimate cost). It has lately been blamed, in the correspondence columns of a leading medical journal, for not exerting its influence in the prevention of war. "The medical profession," says one writer, "have not made one single effort to direct or mould our political or international destiny." The cry is taken up by one of our contemporary hospital magazines: the war, "for which we were unprepared," "could have been prevented."

Doctors are enjoined to exercise their united influence in all manner of problems, social, economic, and political.

Wisdom after the event is a very prevalent attitude just now. All sorts of people, in an effort to shift the blame from their own shoulders, are asking why this or that body did not do more to prevent the war or prepare for it. They complain that we should have put pressure on our fellow-scientists who devote their lives to making bigger and better bombs, or on German doctors—which is easier said than done, considering the pressure already exerted on our unfortunate German colleagues by the Nazi party.

A Bart.'s man more pertinently remarked that this war had much to do with jealousy, hatred, and greed, and that he was sceptical of our profession's power to discourage these vices. It is unlikely that we could succeed where the Church, after 2,000 years of trying, has failed. Many of us preferred to applaud the efforts of a Prime Minister who really did make enormous exertions to pre-

vent this war—and who, oddly enough, was violently criticised for his pains by the very people who now condemn our inactivity.

We are reproached with having done nothing to prepare for the war. At least four years ago, runs the charge, the medical profession should have urged the construction of deep shelters. If we had done any such thing, we should have been denounced as alarmists and warmongers, or represented as bloodthirsty hirelings of armament firms and building contractors. Moreover, there are plenty of people, doctors included, who believe that the policy of Funk-holes First may be mistaken. An alternative slogan is Billions of Bombs on Berlin.

The medical profession, I suppose, is expected to join in the extraordinary clamour for statements of War Aims. Most of the clamourers are people who do very little to win the war, but hope to get something out of it for themselves. "Our main business," says Carlyle, "is not to see what lies dimly at a distance, but to do what lies clearly at hand." By all means let people *think out* the thorny problems of the Peace settlement. One of the tragedies of the First Great War was that the American Senate so signally failed to think out the part which the U.S.A. ought to play in the peace. But why make a Statement, when no one can foretell the course of the war or any of the circumstances which will surround the armistice? One of the most pitiable things about our opponents is the way in which Axis statesmen preach *ad nauseam* about the coming New Order, and indeed regard it as already in force, when there is no guarantee that they will win the war. Further, no

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British statement of War Aims, except the very vaguest, would command any general measure of agreement. A fairly simple War Aim would be the restoration of the integrity of all countries which have in recent years been subjected to aggression, including Ethiopia, China, and Finland. Already some would regard this as too comprehensive. Even simpler, therefore, would be to hit the Germans till they squeal and then hit harder still. Would this Aim secure general agreement?

A question on which doctors might more reasonably be expected to exert their influence is the position of medical refugees from Germany and Austria. Should they be allowed to practice? Should they be interned? Some of us feel that internment is too good for most of them. Others disagree. In which direction is our influence to be exerted? There are numbers of questions on which medical men differ even more, such as voluntary Euthanasia, and the compulsory sterilisation of mental defectives. The greatest controversy of all would probably centre over our attitude to the moral aspects of Venereal Disease. How can we use "our" influence, when opinion is so divided?

Probably all doctors are in favour of better housing and nutrition. They will be equally in favour of a cure for cancer and a good

time all round. The achievement of these objects is not so simple. There is no doubt, however, that the full weight of medical influence should be thrown in support of slum clearance and rehousing, and of re-planning our cities. We should also advocate wholeheartedly a more adequate diet for every man and more hygienic dietetic habits. It is sad that little evacuated East-Enders refuse fresh country food and are miserable because they cannot get fried fish and ice-cream. And if doctors insist (as they should) upon the purification of all milk supplies, they should not omit to publicise the dangers of alcohol and tobacco—though a visit to the Vicarage might make such a campaign seem a trifle hypocritical.

These remarks are admittedly superficial, but they outline a point of view. There are certainly many problems in which doctors are specially interested and in which their influence might usefully be exerted. It does not follow that we should plunge headlong into any controversy, when the agreed opinion of the vast majority of the profession is clearly undetermined. That we are at present a long way from such agreement on any subject may be gleaned from the fact that more than fifty doctors supported a recent anti-vaccination pamphlet. Until the medical profession has definitely made up its mind, the influence of its members is best exerted individually.

Sir Henry Dale, P.R.S.

We offer warm congratulations to Sir Henry Dale on his election as President of the Royal Society. Sir Henry came to Bart.'s from Trinity College, Cambridge, and qualified in 1903. In 1936 he shared the Nobel Prize with Prof. Loeb for his work in identifying acetylcholine as the substance liberated at parasymphathetic endings, at the endings of preganglionic fibres in autonomic ganglia, and at the endings of voluntary motor nerves—brilliant researches which have found important application in clinical medicine.

Since its incorporation in 1662, there have been forty-four Presidents of the Royal Society, of whom only seven have been medical men: Sloane, Pringle, Wollaston, Huxley, Lister, Sherrington, and Hopkins. Sir Henry Dale is the eighth, and the first Bart.'s man ever to reach this eminence. We wish him every success in his distinguished office.

The Late Mr. Eric Gill

Eric Gill, who died on November 16th, was perhaps the most important contemporary British designer and sculptor in the classical tradition.

He designed a medallion for this Journal, which first appeared on the cover in February, 1938. The present cover of the B.M.J. is also his work. Apparently readers of the Bart.'s Journal were more critical than those of the B.M.J., for after a prolonged and acrimonious controversy, Gill's design was rejected.

For those who appreciate his work, we have a few proofs of the medallion on sale in the Journal Office at 1/- each.

Miscellaneous

The Editor begs to apologise for an unfortunate error in the last number of the Journal. The heading "Our Candid Camera" appeared incorrectly above the

photograph of bomb-damage, instead of on page 43 (as indexed). He also apologises for the inferior reproduction of the snapshot of Mr. Rupert Scott.

* * *

A word of tribute is due to the Catering Company for "carrying on" as well as they have done during the last four difficult months. There was a time, in the early days of the *airblitz*, when Bart.'s refectory was the

best place to lunch in the City.

* * *

An account of the Christmas Shows will appear in our next number.

* * *

February Issue.

Contributions for the February issue should reach the Editor, not later than January 13th.

THE HORDER REPORT

The Horder Committee made its first report on September 18th, four days after the Committee had been appointed—a testimonial to the characteristic energy of its Chairman. The delay in publication, though regrettable in some ways, enabled additional recommendations received up to November 12th to be included in the published report. This gives the Committee's recommendations, followed in each instance by a statement of action taken by the Government; this action mostly consisted of giving "instructions to the proper Authorities," *i.e.*, to the Borough Councils. The officials of these Councils are at present grossly overworked, and have proved unwilling to accept responsibility for unorthodox measures, which partly explains why so little has actually been done, three months after the first recommendations were made. No Ministry of Health official has power to *order* that any recommendation be carried out.

One of the most important factors in shelter policy, as emphasised by the Committee, is the evacuation of "useless mouths," and this applies specially to children, with their liability to epidemic infections. But for voluntary (or indeed compulsory) evacuation to be successful, more must be done both for those evacuated and those left behind. Communal centres in the reception areas are essential, to enable host and "guest" to escape from each other for a short time each day, and they should have facilities for the women to do their family washing. In the towns, hostels would allow evacuated wives to feel sure that their husbands were being well fed, and were not setting up house with other women. Difficulty in finding cheap storage for furniture is also hindering evacuation. Regarding the evacuation of children, it is curious that the Government gives railway

vouchers to all classes of evacuees except children of school age travelling alone to stay with relatives. After their arrival, however, a billeting allowance is paid. Some old people have been evacuated, all to institutions in country towns. This was never likely to appeal to those who could possibly manage to live in London; but anyway, since the bombing of the Midlands, no more old people are being evacuated.

To maintain the health of those left behind is the next essential.

Infection in shelters spreads by droplets or by direct contact. Against droplet infection the chief measures are adequate ventilation and adequate air space per person. The Committee urges full use of natural ventilation in shelters, supervised by the shelter marshal; but people prefer being warm to being healthy, and in winter the job of keeping open doors which could be blocked up would be no sinecure. This dislike of fresh air would vanish if the shelters were properly warmed, and it seems that the Committee has made a mistake in discouraging the heating of shelters. The air space necessary varies with the ventilation rate. The Ministry of Home Security suggests a minimum of 50 cu. ft. per person, but on board ship, where space is also at a premium, 120 cu. ft. is the least allowed, and this is for sailors who are otherwise living in a very healthy environment.

The use of face masks is under consideration by the Committee. An intensive press campaign would be required to persuade people that masks were really necessary, and not just a ridiculous fad, and indeed any co-operation by the public in health measures will only be achieved if people are thoroughly frightened of epidemics. Reassuring statements by the Government or medical profession are therefore to be deplored.

The prevention of contact infection is equally important. The dangers of an enteric epidemic due to sewage-polluted water supplies do not seem to be as great as the dangers from the insanitary conditions of some large shelters. In this connection, the B.M.J. has recently suggested the provision of separate receptacles for faeces and urine. At least local authorities should provide sufficient lavatory accommodation to prevent buckets overflowing during the night, as still happens in certain shelters, and should ensure that the contents of buckets are not poured down drains inside the shelter.

Prophylactic immunisation against diphtheria is advised by the Committee, but since 80 per cent. of the adult population is Schick negative, and the Government aims at evacuating the entire child population, immunisation against diphtheria seems less important than against the enteric fevers. These are not mentioned in the recommendations.

The last recommendation of the report states that "As there is no good evidence that to supply vitamins in the form of medicines reduces the incidence of the common bacterial infections, the Committee does not advise their use in this form." Surely this is only true of those who already receive an adequate supply of vitamins in their diet. Since the vast majority of the shelter population comes

from the poorer and less "vitamin-conscious" classes, mild vitamin deficiency is probably common among them, especially in wartime.

Parasites of all kinds thrive in the shelters. Many Londoners have there met the bed-bug for the first time, and scabies and pediculosis are common. Surely it is inadvisable to permit bedding to be left indefinitely in shelters.

The Committee advises propaganda to popularise Anderson shelters. This may have been feasible in September, but now many Andersons are full of water, and even if they are dry, people are unwilling to forsake the social life of large shelters to spend up to 14 hours a day in such miserable surroundings. Family surface shelters have similar disadvantages. They are unlighted, unheated, and often the street gutter runs through them. They are usually referred to as "brick coffins." Railway arches are mentioned in the recommendations as possible shelters. It cannot be wise to encourage the public to spend their nights beneath military objectives which are easily visible from a great height. Moreover, railways arches were not designed to be weatherproof.

A.G.L.

* May we take this opportunity of warmly congratulating Lord Horder (a past Editor of this Journal) on his appointment to preside over the Shelter Health Committee—and on the remarkable likeness achieved by Low on November 22nd!—Ed.

THE OLD LADY USED SALT!

By ARTHUR APPLIN

THIS happened to my father, some years ago. It was a story that always thrilled me as a boy. It will perhaps amuse Bart's readers; moreover, if this war is prolonged indefinitely, which God forbid, they might find a useful hint in the story's dénouement.

It was a night when a terrible snowstorm raged on Dartmoor (so my father always began his yarn). I had spent the morning at Moreton Hampstead, and it was necessary for me to reach Princetown on the other side of the moor the same day. Disregarding the warnings of the old men who knew the country better than I did, I started to walk. It was blowing half a gale, immense clouds came charging over the tors; I thought the wind would keep off the threatening snow before I reached Moor Gate. The clouds burst, like gargantuan bags of flour and the hills and valleys disappeared.

Half blinded, I struggled on, groping with my stick for the blocks of stone that outlined the road.

It began to grow dark; that scared me. I had lost all sense of direction. I stopped to shelter behind a cairn and took a drink from my flask.

The wind increased, screaming as it raced down from the hills, making whirlpools of the frozen particles of ice. Gradually my body became numb, and I knew that if I stayed there the cold would overcome me and I should just lie down in the snow and be frozen to death.

During a lull in the storm I saw the shadow of Warren Tor, and bushes of gorse swinging and chattering in the wind. This was the most desolate part of the moors, and somewhere here I remembered, where four roads crossed, there was an old, ill-favoured

inn. Suddenly I heard the ghostly creaking of chains. I stopped to listen, remembering it was not so long ago that they used to hang men from the gibbets at the crossroads.

I rubbed the frozen snow from my eyes, and then I saw the sign of the inn swinging to and fro. I made my way to the door and banged on it. Silence answered me. I knocked again and again, and at last I heard someone moving inside, a bolt being slowly withdrawn. A pale light showed through a crack in the door; putting my shoulder to it I pushed it open. The draught sent a flurry of smoke and a cloud of sparks from the embers of a peat fire in the open grate; then the door closed and, at the same moment, the light went out. The room was in darkness. I turned quickly, and, standing with my back to the fireplace and my feet on the hearth, I waited.

I heard the bolts of the door shoot back into place, then the sound of shuffling feet. A match was struck, and by its light I saw a tall, gaunt woman in a frayed, grey dressing gown. She lit the small oil lamp which she had been carrying and held it above her head to see me better. Her eyes were heavy and sunken, her matted grey hair fell over her ears to her shoulders; the bones of her long hands protruded through the flesh.

"And who may yew be, I'd like to know, forcing yew're way into a body's house at this time o' night?"

I told her that I'd walked from Moreton and was on my way to Princetown when the storm overtook me. "This is the Black Tor inn, isn't it?" I continued boldly. "I want a bed for the night."

She came a little closer, looking at me hard. "I thought yew might be one of them convicts from the prison—maybe yew'd be more comfortable there than 'ere. I ain't got no room for yew."

"But that's absurd," I cried. "You can give me a shake-down here by the fire!" I glanced round the room and saw a bed in the corner.

The woman's eyes followed my gaze. "That's where I be sleeping. There ain't no other room in the house—leastways not where yew'd care to stay."

I glanced up the narrow staircase that led to the floor above. "You must have a room up there; the inn can't be full," I said.

"There's no one here but myself." The woman laughed grimly. "Ay, there'll be a room up there yew can have, if yew bain't afraid of ghosts!"

"I'm afraid of nothing," I replied. But I *was* afraid! All the evil tales I'd heard about this lonely inn came vividly to my mind. I tried to keep a steady hand as I took the candle she held out to me. I followed her up the staircase.

She pushed open a heavy oak door and led the way into a large, low-ceilinged room. I saw a great four-poster bed, a tall wardrobe, and against one of the walls a long oak chest.

"Yew can lie here if yew've a mind," the woman said; "if you goes straight to bed—and mind yew stop there until I calls yew in the morning!"

I put the candle down on the oak chest; she picked it up and placed it on the table beside the bed. Without another word, she left the room. I took off my coat and unfastened my boots, then, tip-toeing to the door I opened it a few inches and peered out. There was no light anywhere—no sound. I wondered if the old woman had gone back to bed or if she was waiting in the room below. I shut the door again, and found the key had been taken from the lock.

I filled and lit my pipe and sat on the edge of the bed, pulling the heavy counterpane round my shoulders. I was afraid to go to bed. I listened to the creaking of the sign outside, to the wind howling. I had a queer feeling that I was not alone, that something, or someone, was waiting in the room, waiting until I got into bed and put out the light. And then I saw that there were only two or three inches of candle. Getting up, I turned back the bedclothes, looked under the bed. I opened the wardrobe, saw a heap of clothes lying in the bottom of it: a man's coat, waistcoat and trousers, a flannel shirt, socks and a pair of boots. Hanging from the peg was a hat and overcoat. Where, I asked myself with sudden panic, was the owner of these clothes? What had happened to him? Had he taken shelter here one night, and been robbed and murdered in his sleep?

The flame of the candle was blowing to and fro, the cheap tallow disappearing quickly. I tried to pull the bed in front of the door, but it was too heavy to move. Then I tried the chest. If I did fall asleep I was going to make it impossible for anyone to come into the room without my waking up. Though I exerted all my strength the weight of the chest was such that I could hardly move it. It was one of those massive oak chests which people use for storing linen. I opened it. For an instant my heart stopped

OUR CANDID CAMERA



"There's a nice leg of lamb to-day"

beating as I saw the body of a dead man! For a long time I stood there paralysed with horror. The body was covered with a blanket, so I could not see how he had met his death, but that he had been murdered I had no doubt.

Slowly I closed the lid. I listened at the door again, but there was no movement anywhere. I wedged the chair under the handle of the door and in front of it placed the table. I pulled on my coat again and picked up my stick, sat on the edge of the bed and waited.

The candle went out; I had no idea of the time. Fear kept me awake, though the night seemed to be prolonging itself into infinity. I started at every sound—a rat scampering across the floor, the murmuring of the wind in the chimney; again and again the stairs creaked, but no one came.

At last a little daylight filtered through

the window. I waited until it was quite light, then, removing the barricade from the door and taking a firm grip on my stick, I opened the door and shouted to the woman to come up.

"All right, all right," I heard her croak; "bain't gone seven yet. I'll be making yew a cup of tea."

"I'm not drinking any tea," I cried; "come up here—and be quick about it!"

She was still wearing the old dressing gown, her grey matted hair still fell about her shoulders. She stopped just outside the door and peered at me suspiciously.

"What 'ave yew been up to?" she asked in a low voice. "I warned yew to go straight to bed, didn't I?"

I pulled open the lid of the chest and pointed to the dead man. "So that you might murder me, as you murdered this man? . . . Stop where you are!" as she

made a movement towards me. "We're both going to wait here until I can get someone who'll fetch the police."

The ghost of a smile lightened her sombre eyes, and flickered across the thin lips.

"Whatever be 'e talking about? Sure yew must have been pixillated, my dear. There ain't been no murder here. That's my old

man—he died three days back, but the snaw was scat about so thick us couldn't bury un, so I just took and salted un in, same as us do with the pigs, because I knew that way he'd keep so us could give un a proper christian burial. Now yew just shut un up again, and come down stairs and I'll give yew a nice hot cup of tea!"



Method of treatment of severe shock by rest and warmth (from radiant heat bath), fluid by mouth (in absence of abdominal injury), and rapid plasma transfusion.

THE DEVELOPMENT OF BLOOD TRANSFUSION (*Concluded*)

by ERIC C. O. JEWESBURY, B.M., M.R.C.P.

III. PRESERVED PLASMA AND SERUM.

ONE of the disadvantages of storing blood is that unless it is used within a certain time it becomes unsuitable for transfusion, owing to hæmolysis and other changes. This became painfully evident early in

the war when there was an inevitable wastage of blood that was collected but not required for use within the original statutory period of 14 days. It is now possible to avoid this wastage by making use of the citrated plasma which can be separated from the blood cells and stored independently.

Sources and Scope.

Plasma from this source can be used for transfusion in many cases where the prime necessity is to restore the blood volume and there are certain conditions to be mentioned in which the indication for plasma is greater than the indication for whole blood. The citrated plasma has a number of definite advantages over whole blood.

1. It will keep well at room temperature and does not have to be preserved in a refrigerator.

2. Transport is simplified both on this account and also because it is not affected by shaking (which tends to hæmolyse whole blood).

3. It can be stored for a much longer period than whole blood. The exact safe-storage period has not yet been determined, but Dr. N. Nasset of Glenview, Illinois, who has had experience with some 300 plasma transfusions, states that it will keep satisfactorily for at least a year at room temperature and that he has seen no untoward reactions following its use.

4. Grouping and cross-grouping tests can be dispensed with.

5. Serological examination is completed before the plasma is stored.

6. In addition to the intravenous route, plasma can be given intramuscularly and subcutaneously, its rates of absorption being approximately that of physiological salt solution.

Blood may, of course, be taken from donors for the express purpose of obtaining plasma, in which case the stored blood should be kept undisturbed in the refrigerator for three or four days to allow maximum sedimentation of the red cells to occur. The supernatant fluid can then be syphoned off, with careful aseptic precautions, into fresh bottles. Any risk of subsequent growth of bacteria or moulds, during storage at room temperature, may be prevented either by bacterial filtration of the plasma or by the addition of small amounts of merthiolate or sulphonamide.

At the Cook County Hospital and elsewhere the residual red cells have been re-suspended in physiological saline solution, sugar solution or other fluid, and used as "erythrocyte suspension" in varying concentrations for transfusion in cases of anæmia where there is no marked deficiency of plasma proteins. (Fantus 1938)

After whole citrated blood has been stored for two or three weeks there is usually no change in the colour of the supernatant fluid,

although hæmolysis has been slowly progressing throughout the red cell layer. The citrated plasma can therefore be separated satisfactorily for some time after the blood has been collected. Group AB plasma is the ideal for transfusion since it contains neither of the agglutinins *alpha* or *beta*, while Group O is theoretically the least suitable since it contains both *alpha* and *beta*.

Nasset and his colleagues have given 291 transfusions of incompatible or unmatched plasma intravenously, intramuscularly or subcutaneously without reaction of any kind, and unless large amounts of single-group plasma are to be used there appears to be no necessity whatever for grouping or cross-grouping tests.

The risk of reverse agglutination seems to be slight, for, although very large volumes of Group O blood have frequently been given to patients of another group, no authentic cases have been reported in which hæmolysis of the recipient's cells has been produced by agglutinins in the donor's plasma. The strength of incoming agglutinin is in any case probably considerably diluted or suppressed by the recipient's plasma.

When Group AB plasma (which contains no agglutinins) or plasma of the same group as the patient's is used there is no possibility of agglutination occurring, even when large amounts are given.

The artificial production of group AB blood has been described by Edwards, Kay and Davie (1940) who have mixed group A and B bloods and withdrawn the resultant plasma. Recently the use of pooled plasma and serum has also proved satisfactory. The mixing in this instance is done after separation from the red cells. Levinson and Cronheim (1940) state that they have administered amounts up to 1,000 c.c. of pooled human serum intravenously in the past ten years in more than 1,000 instances without any evidence of incompatibility. Each pool is made up of serum from thirty to fifty different specimens of blood and they have noticed that large pools of this kind never showed rich agglutinin content, whereas many of the individual sera that made up the pool possessed a high agglutinin titre.

The plasma collected from the blood supply depots is also pooled, all groups being mixed as they become available. Very often there is no detachable agglutinin titre in the pooled plasma, though very low titres up to 1 in 4 are sometimes found. It is therefore safe to say that plasma or serum pooled in this way can safely be given to a patient of any group

without risk of agglutination of the patient's red cells.

It is, of course, important that an adequate amount of the rarer group AB and B plasmas be included in the pool, otherwise the combined *beta* agglutinins of the A and O plasmas go un-neutralized and might cause trouble, if given in excess, to a group B recipient.

Dilution of the agglutinins is not an adequate explanation of the fall in titre. For instance, Levinson and Cronheim found that if *alpha* or *beta* serum was diluted with saline solution the average agglutinin titre was 1 in 21, whereas diluted with an equal amount of serum of the opposite group the same sera gave an average agglutinin titre of only 1 in 2. There seems to be some neutralizing action of the sera upon each other and this may be the result of the presence in solution of antigen such as occurs in the red cells. Suppression of agglutinin titre does not occur when plasmas of only the same group are mixed.

A further advantage of this use of blood from the banks and depots is that a purpose is found for blood of the uncommon groups AB and B. Donors of all blood groups can thus be utilized, and the disappointed "Universal Recipient" of blood, whose blood has previously been refused now finds that he has become a "Universal Donor"—of plasma.

Before discussing the special values of the non-cellular part of the blood, two further steps in its preservation must be described. Although citrated plasma had many advantages, it was felt that if the product could be dried the question of storage and transportability would be even further simplified and the possibility of bacterial growth greatly reduced. Florsdorf and Mudd described a method of drying plasma in 1935, but it is expensive both in capital outlay and running costs since it consists in freezing the plasma in carbon dioxide snow and evaporating it under a very high vacuum. Edwards and his co-workers (1940) have, however, described a cheap and simple method whereby plasma is dried by heating it to 37° C. and causing it to boil at this temperature by means of a low vacuum exerted by an ordinary filter pump. To restore the constitution of the plasma it is only necessary to dissolve it in warm sterile water; the reconstituted plasma is indistinguishable in appearance from the original liquid and the proteins appear to be altered neither quantitatively nor qualitatively. It must be filtered before use and may be administered by syringe or by gravity.

After the satisfactory preparation of dried

plasma from the unused citrated blood in the blood banks, thoughts naturally turned to the drying of pure serum. This serum would be obtained from the blood of donors bled specially for the purpose, and it would not be mixed with saline-citrate or any other anticoagulant solution. Dried serum has been satisfactorily prepared and is now being produced in large quantities for clinical use. The serum is separated from the blood clot usually within 24 hours after the blood has been withdrawn from the donor. It is filtered and dried by freezing in vacuo, the final traces of moisture being removed over phosphorus pentoxide in vacuo. Great care is taken to keep the serum sterile throughout its preparation and drying, and this is checked by frequent bacteriological examination. The dried product contains the proteins, salts and probably most of the fats of the original serum. There is no evidence that the proteins undergo "denaturation" during drying. The dried serum, which is a pale yellow crystalline powder, can be kept at room temperature and is supplied in air-tight bottles, ready for use.

At the present time dried serum is being prepared in large amounts from blood collected by the Medical Research Council blood supply depôts around London. Each bottle of dried serum produced represents 200 c.c. of original serum and is reconstituted by the addition of 190 c.c. of warm sterile distilled water. The bottles are sealed with a metal screw-cap holding down a rubber disc. The centre of the metal cap can be easily prised off and the water injected with a sterile syringe and needle, if a second sterile needle is introduced to allow the escape of the displaced air. The bottle should be kept warm in water or in an incubator (at 37° C.) while the dry serum is being dissolved. This should be accomplished in about 2 minutes. When the solution is complete it can be transferred to an ordinary transfusion set for injection.

Some investigations have been done on serum of twice normal and four times normal concentration. These are used when it is desired to give a fluid of very high osmotic pressure and they are made up by dissolving the dried serum in 90 c.c. and 40 c.c. of water respectively (the solution volume of the dried serum in the bottle amounting to some 10 c.c.). These solutions are necessarily more viscous and more slowly produced. It may be fifteen minutes before the twice normal solution is ready and an hour before the four times normal is in complete solution. Violent shaking of the bottle should be avoided,

or else many bubbles will be produced. Four times normal reconstituted serum is turbid and very viscous, but does not seem to be unsuitable for intravenous use if injected under gentle pressure. 50 c.c. can be introduced by syringe through a wide-bore needle in 7-10 minutes. The protein content of this concentrated serum is about 28%, and that of the normally reconstituted serum about 7%, which is still higher than that in citrated plasma, which owing to the dilution factor is about 3.5%.

The great practical advantage of dried plasma and serum is seen especially in conditions of war, when bottles can be stored indefinitely but are easily distributed, ready for immediate use with the simple addition of water. Blood collected from volunteers at the blood depôts in this country is converted into dried serum which is sent for the use of the Army, many hundreds of miles overseas. At the same time dried serum obtained from several thousand volunteers in New York is now being sent by the American Red Cross for the use of wounded civilians and soldiers in England.

The M.R.C. Blood Depôts are at present supplying large stocks of pooled serum in dried form and pooled plasma in liquid form. The serum contains no added substances and can be reconstituted with water to any strength. It differs from unmodified plasma in the absence of fibrinogen, but since this represents only one-thirtieth of the total plasma protein the difference is insignificant.

The preserved liquid plasma is only half-strength since it is obtained from blood diluted by anticoagulant solution. The anticoagulant solution at present employed consists of 1.05% sodium citrate and 3% glucose in 0.85% saline. The standard blood-bottle contains 180 c.c. of this preservative and 360 c.c. of whole blood. After the red cells have been allowed to settle to the bottom, about 360 c.c. of diluted plasma can be obtained from each bottle. The composition of this fluid is consequently rather different from that of pure plasma, particularly in its lower protein and higher sugar content.

At present some observations are being made on the use of stored liquid serum which has a normal protein content (about 7%). Serum from clotted blood of all groups is pooled and filtered; it keeps well in liquid form.

Wound Shock.

The chief value of plasma and serum is in the treatment of shock from wounds and burns.

Shock tends to be produced by a number of causes, especially tissue-damage, pain, toxæmia and shortage or loss of body fluids—as a result of hæmorrhage, œdema, vomiting, sweating or diarrhœa. It is aggravated by long exposure to cold, fatigue and other factors. A constant feature of shock is reduction of blood volume and, although all associated factors must be considered, the most important single requirement for arresting the progress of the shock, is prompt restoration of blood volume and so of tissue metabolism. This must be accomplished before there is any attempt at major surgery.

In the shock that accompanies severe injuries without gross hæmorrhage some change occurs in the capillaries which allows the exudation of fluid out of the circulation. Hæmoconcentration occurs in the blood vessels, especially the capillaries, and the red cell count often increases by 50% or more. The blood becomes more viscous and the hæmatocrit reading rises proportionately. The concentration of plasma proteins, however, does not rise in parallel with the red cell count and often it is decreased. Thus it can be assumed that some of the proteins escape from the circulation into the tissues. The osmotic pressure of the blood is thereby reduced and the more severe and prolonged the state of shock, the greater is the outpouring of fluid and plasma protein from the circulation.

The most urgent need in such cases of non-hæmorrhagic shock is not blood since a state of hæmoconcentration already exists, but the provision of fluid to restore the circulatory volume and reduce the viscosity of the blood. Intravenous saline therapy produces a mere temporary improvement, since the osmotic pressure of the plasma is reduced by dilution and much of the salt passes into the tissues where it encourages the retention of more fluid.

Miller and Poindexter, in 1932, demonstrated that isotonic crystalloid solutions pass easily from the circulation into the tissue spaces and are unable to raise the blood volume for more than a brief space of time. Hypertonic solutions produce a greater effect, but even they have been shown to leave the circulation relatively rapidly. Gum saline is better than plain saline or glucose solutions but not so effective as blood, plasma or serum.

The administration of plasma or serum seems to be the most rational method of treatment since the natural plasma proteins will be increased without the addition of blood cells, and the osmotic pressure and fluid content of the circulatory blood should be restored. This has in fact been found to be so.

Mahoney (1938) employed dried plasma in the treatment of experimental shock in animals and found that it was more efficient than whole blood, physiological saline or gum acacia solution in restoring the normal blood pressure. Bond and Wright (1938) used dried serum in similar cases and found that it was capable of raising and maintaining the blood-pressure for several hours.

Best and Solandt (1940) state that in their recent experimental work serum and plasma have been used interchangeably and that the results are identical. Both provide fluid and both provide proteins which by their osmotic pressure retain the fluid in the blood-stream and help to restore the blood volume.

Buttle and others (1940), however, consider that serum is more likely to cause reactions than is plasma. Opinion on this point is divided and it may be that this difference can be explained by differences in the technique of preparation.

Hæmorrhage.

Levinson, Neuwelt and Necheles (1940), working on dogs, have found that serum is also an effective agent in combating all the effects of severe hæmorrhage and resultant secondary shock, except the loss of red blood cells. The superiority of serum over saline solution was striking. When the latter was used the animals derived only partial and temporary benefit. The shock progressed and proved fatal. When serum was used, however, the recovery was striking and permanent. Blood pressures were well maintained, alkali reserve and plasma proteins remained normal, shock was effectively combated and all animals survived. The red blood cells and the hæmoglobin was markedly diminished, but the animals showed no serious effects from this anæmia and their general condition was surprisingly good at the end of the experiment. The extent to which a dog could be repeatedly bled when reinfused with only serum proved astonishing.

Edwards, Kay and Davie point out that it is rare for a patient to lose more than three pints of blood. This leaves him with 75% of his erythrocytes in some part of the circulation.

Provided that the necessary amount of fluid can be introduced into the circulation—and made to stay in—his remaining red cells should be entirely adequate to maintain life. It is in such cases that the infusion of plasma protein should provide the necessary osmotic pressure to keep the fluid in the vessels. It should be noted, however, that if larger or repeated hæmorrhages have occurred transfusion of plasma alone may result in dangerous lowering of the hæmoglobin concentration.

The Medical Research Council, in their memorandum on the treatment of wound shock (1940) state that . . . "even in hæmorrhage the restoration of blood volume, serum proteins and an adequate blood pressure may be of greater value than increasing the oxygen carrying power of the blood; indeed, when the amount of fluid in effective circulation is increased, the efficiency of such red cells as have not been lost by hæmorrhage is automatically increased."

Brennan (1940) has recently found that after hæmorrhage the red corpuscles tend to increase appreciably in size and that many of them are side-tracked within the body—probably in the muscle capillaries. The blood stream in the capillaries is first slowed and later in many of them actually stops, partly because of the lowered blood pressure and partly because of the mechanical effect of the swollen corpuscles. He states that a plasma transfusion in such a case will cause both a restoration of the mean corpuscular volume and a return of red cells into the general circulation. He therefore believes that plasma transfusions should rival whole blood transfusions in the treatment of acute hæmorrhage and should become a routine measure in the treatment of severe hæmorrhage.

Levinson and his colleagues (1940) express a similar view. Unlike Brennan they find a fall in the blood count after serum transfusion, but they stress the value of serum as an immediate and readily available means of overcoming the shock that accompanies hæmorrhage, "so that if blood is subsequently administered it will be given to overcome secondary anæmia rather than to treat the shock and collapse."

To sum up, one may say that after acute hæmorrhage the administration of whole blood to replace that which has been lost seems the most rational procedure, although plasma and serum are of value in restoring the blood volume if whole blood is not at hand.

Burns.

In the treatment of shock from burns serum or plasma is pre-eminently suitable. In this condition the capillary walls are damaged, possibly by toxic substances absorbed from the burned areas. There follows an outpouring of fluid which is rich in plasma proteins and which produces the characteristic vesication. Underhill (1930) has demonstrated experimentally that in a burn of one-sixth of the body surface 70% of the blood volume is lost in 24 hours through increased capillary permeability to plasma. Hæmoconcentration results and the blood pressure falls.

Trusler, Egbert and Williams (1939) have emphasized the danger of giving large amounts of water by mouth in such cases, since a state of "water intoxication" can result, as borne out by the chemical changes in the blood, particularly the very low chloride level. They found that salt solution and dextrose solution given intravenously in large quantities were useless for severely burned animals, since neither of these fluids will stay in the capillaries. The addition of acacia was without effect. Animals which received blood transfusions were able to survive the otherwise fatal shock state and their blood chemistry tended to become more normal. Trusler and his colleagues felt that the successful treatment of burn shock depended on systemic measures directed toward controlling the blood chemistry and that local treatment had little to do with this part of the problem. They describe the case of a girl who was severely burnt and who received two blood transfusions. Then, because her red cell count was 6,000,000 per cu. mm. and her total blood proteins only 4.6% it was decided to discard the red cells from the next transfusion and give only the plasma. Her condition improved, and two more transfusions, one of blood and one of plasma were given, after which she made a good recovery.

McClure (1939) has also introduced plasma into the treatment of burns. He advises that when hæmoglobin values of more than 115% (Haldane) are obtained plasma transfusion should be given.

Elkinton (1939) has described four cases of severe burns, all of which showed hæmoconcentration and plasma protein loss—and were treated by transfusion of plasma. The plasma appeared to lower the hæmatocrit and raise the protein level successfully in all the cases.

Black (1940), at Oxford, has recently used both half-strength plasma and serum of four times normal strength in the treatment of

burn-shock. No post-transfusion reactions occurred in any instances, but the dilute plasma was found to be much more satisfactory than the concentrated serum in its clinical and chemical effects.

Practical Problems.

One of the most difficult problems as yet is to foretell the degree of shock that may develop in a patient and even to evaluate it clinically when it occurs. The state of the blood pressure and the pulse rate in some cases gives no indication of the onset of progressive shock; probably the red cell count, hæmatocrit and hæmoglobin percentage are the most valuable guides. Moon (1939) has pointed out that hæmoconcentration may be present before there is any fall of systolic blood pressure. Consequently a simple hæmoglobin estimation is a valuable and sensitive index of the onset of shock in a doubtful case.

Another problem is the decision as to how much plasma should be given to a severely shocked patient. Usually the administration of three or more bottles is associated with marked clinical improvement. Black has suggested the following formula as a means of determining the amount of plasma lost and therefore the amount to be transfused:—

$$\frac{\text{Hb.}}{100} = \frac{5}{5 - x}.$$

In this equation Hb. is the observed hæmoglobin percentage (Haldane) and x is the volume of plasma lost (in litres). The equation is based on the assumption that the patient previously had a hæmoglobin percentage of 100 and that his blood volume was five litres—also that the transfusor is quick at figures. It is helpful as a rough guide.

The optimum speed of administration is also as yet undetermined, but in the case of shocked patients with a low blood volume and collapsed veins it has been found safe to inject serum and plasma at a rapid rate, particularly at the beginning of the transfusion—namely about 500 c.c. in 10 minutes.

Concentrated serum, given intravenously, has also been used in the treatment of pulmonary oedema in an attempt to reduce the tendency of fluid and salt to escape from the capillaries. Renal oedema (of the "nephrotic" kind) and perhaps "famine oedema," in which considerable diminution of the plasma proteins occurs, may also be benefited by plasma proteins given as concentrated serum. Hughes and others (1938) have found the intravenous administration of concentrated serum effective in reducing intracranial pressure. More

experience, however, is needed before any definite conclusions can be drawn concerning these and other possible uses of serum and plasma.

The perpetuation after the war of large supplies of blood, plasma and serum from peace-time volunteers will in itself present a large problem of organization.

The methods of collection, preservation and use seem to be almost mastered, but much work yet remains to be done. After the remarkable record of independent discoveries

that have played their part in the development of blood transfusion to its present state, he would be a rash man who believed that perfection had been even nearly attained.

A list of references is not included since, if complete, it would demand too much space from an already generous Editor. I hope I have acknowledged all sources of information in the text, but for bibliographies I am indebted to Mr. Geoffrey Keynes and Mr. Victor Riddell whose books, both called "Blood Transfusion" (1922 and 1939) are outstanding.—E.C.O.J.

(concluded)

A CASE OF DISSECTING ANEURYSM

Mr. J. H., a wine merchant, age 70, was admitted to St. Bartholomew's Hospital at 11.15 a.m. on Monday, November 11th, 1940, complaining of loss of the use of both legs and pain in the back.

The history was that four days previously he had noticed swelling of his ankles, which had disappeared after one day in bed. On the morning of admission the patient had gone to his office feeling well but, later on, while standing, he suddenly felt as if something was constricting his chest about the level of the 5th ribs. There was no conspicuous pain and he was able to walk a few yards and sit down. The apparent constriction passed down his chest and abdomen as a band and radiated right down to the toes, after which active movement of the lower limbs was impossible. There was some sweating at the time, but no other symptoms.

On admission the patient looked pale and his skin, especially over the legs and feet, was dry and cold. There was no cyanosis and no severe pain, although the patient asked for a pillow to support his back, and this made him more comfortable. The pulse rate was 56, the pressure was low but volume good.

Examination of the heart revealed nothing abnormal except a soft apical systolic bruit. The blood pressure was 145/68. He could not lift himself up from the stretcher or move his left leg, but movement in the right leg was full, though weak.

There was anaesthesia to pin-prick below the umbilicus and over both legs except for scattered areas of normal sensation on the right. The right knee jerk was present, but other tendon and skin reflexes were absent. The patient became incontinent of urine and faeces soon after going up to the ward.

At 4 p.m. the patient felt well and was not in pain. On examination the pulse rate was 72 and irregular, the irregularity being due to extra systoles. The abdomen and legs were normal except for an area of hyperaesthesia just below the umbilicus. At 6 p.m. he began to have pain in

the lower chest posteriorly, and later in the lower abdomen. He collapsed with tachycardia, incontinence and loss of the use of both legs. The pain became increasingly severe and morphia gr. one-sixth (mgms. 10) given at 6.25 having only a slight effect; another similar dose was given at 6.50.

At 7.20 the pain seemed to be somewhat relieved and the patient was lying quietly and drowsily curled up on his right side. The radial pulse was weak, the femoral pulse was scarcely palpable on either side, and there was no pulsation in the posterior tibial arteries. The diagnosis of Dissecting Aneurysm of the aorta was then made.

The patient became progressively weaker and died at 9.30 p.m.

The post mortem examination showed the pericardium to contain $\frac{1}{2}$ to $\frac{3}{4}$ of a pint of fresh, fluid blood. The aorta showed fairly advanced atheroma throughout its length and a dissecting aneurysm extending from the aortic valve cusps down to the bifurcation of the common iliac arteries. It originated half an inch beyond the left subclavian artery and in the region of the ascending aorta had ruptured into the pericardium and anterior mediastinum. In the ascending part there was antemortem blood-clot which was beginning to organise.

In the initial stages the differential diagnosis of this case was made difficult by the apparent involvement of the nervous system. This was made particularly difficult by the fact that when the patient was first seen the legs were recovering rapidly. When further symptoms began to develop the nature of the disease became apparent because of the severity of the pain, its distribution, the marked vasomotor collapse, and the interruption of the circulation to the lower extremities.

Such cases are still comparatively rare, and it was considered worth while to put this one on record.

I wish to thank Dr. Scowen for permission to publish this case. J. P. HAILE.

EDITOR'S NOTE

Subscription rates for the Journal are: Life, £5 5s.; 5 years, £1 11s. 6d.; annual, 7s. 6d. Readers are reminded that these rates bear no relation to the nominal charge of 4d. per copy made to students, to limit numbers in view of

paper shortage; 4d. actually by no means covers the cost of producing one copy.

The charge for Nurses (and persons working in the Hospital) is 6d. For all others it is 9d.

FOUR TO SIX

O Dawn, most blessed in these days of strife.
Thou Herald, changing thoughts of Death to
Life.

At first, a streak of green in Eastern sky,
Now shows the path where evil one did fly.
The stars above soon passing out of sight,
Just twinkled at the seeming threat of Might
The full-faced Moon still stares with won-
d'ring awe

For he has seen crude Nature in the raw
The birds awaken and with joy they find
Their healing sanctum rock-like left behind.
A fiery distant glow alone but shows
The wounded city after night of blows.
But Justice looking, through another gaping
void

Sees there, a city made by men—by men
destroyed.

"Roof Watcher."

CORRESPONDENCE

To the Editor, St. Bartholomew's Hospital Journal
Sir,

It is always gratifying to see a reference to oneself in print. When I wrote to the British Medical Journal pleading for the introduction of the metric system, not only for Medicine but in general, I did so in the certain knowledge that no such change was ever likely to take place. Hence the facetious tone of my letter. And now you have put the case for revision in a leading article. It will do no good; the forces of reaction are too strong.

The Medical Unit may strive for uniformity, but in vain. Indeed, the custom of converting an accepted apothecaries' dose into a metric dose, so that it becomes, for instance, 16.29 mgm. only provides evidence for those who maintain that such a change would do nothing to simplify the present system. Medicine is, however, comparatively lucky. Consider the task of the international banker: consider the engineer. Ask the apothecaries, ask Dr. Maxwell, Sir, if he would be good enough to translate foot-pounds into metric terms, or even feet into metres. Many is the time when, according to my calculations, I have reached the summit of some alpine peak though to my chagrin it is clearly evident that there is yet much to be climbed.

I remain,

Yours faithfully,

HOGARTH.

* * *

December 13th, 1940.

To the Editor, St. Bartholomew's Hospital Journal
Sir,

I wish to protest against the almost incredible docility of English medical students. This is partly due to the rigidity of the curriculum and the fantastic system of sign-ups, but also to the lethargy of the main body of students, and it is in the hope of stirring this torpid mass that I write this letter.

A medical student chooses his Medical School because of its reputation or because of family tradition, and having entered it, finds himself completely at the mercy of its Faculty and that of the Universities. To obtain his degree, he is forced to attend a vast series of lectures, demonstrations, ward-rounds, etc., whether or not these are of any value. If a lecture, or course of lectures, is impossibly bad, he must either sit through them all (taking in with him a novel or a textbook), or contrive to get himself signed-up in his absence.

Most students genuinely wish to gain as much knowledge as possible during their training, and they themselves should decide whether or not they shall attend a lecture; that they will attend a good lecture without any compulsion is indicated by the exceptionally large audiences at those given by lecturers who know their job. I believe that if the Medical Faculty were compelled to sit through one particular course of lectures lately delivered at Bart's, they would wholeheartedly support this revolutionary idea.

Since it is too much to hope for a basic change in educational method, I suggest that students should at least show their appreciation of a good lecture by applause, and their disgust at a bad one by equally unmistakable methods.

I am, Sir, your humble servant,

BASHFUL.

CAMBRIDGE NEWS

ANOTHER arduous term is now coming to an end without serious disturbance from the enemy, and all preclinical students are looking forward to a well-earned Christmas break. Further successes have been recorded by the 46- and 49-weekers, and a large proportion of those who started their anatomy, physiology and biochemistry in September, 1939, will be actively engaged in clinical work next month.

The first-year classes in biology, chemistry and physics are now being held in the University laboratories and, as was expected, this scheme has worked very well. Although these University laboratories are in some cases not quite as modern as our own in Charterhouse Square, it is possible that many a Bart's man will be heard in the future to tell his grandchildren that he did his physics in the great Cavendish Laboratory!

The Rugger, Soccer and Hockey Clubs have continued to flourish, and have played and won many matches. The 1st Preclinical Rugger XV are now losing many of their stalwarts; several members of this team, having shown in the December 2nd M.B. Examination that there is nothing incompatible be-

tween brains and brawn, are now moving on to St. Albans. Plenty of reserve preclinical material is available, however, for a few weeks ago a small committee was appointed, with G. J. Hadfield as Secretary, to organize a 2nd XV. How well this task has been accomplished will be seen below, and it is hoped that the 2nd XV will continue to function next term.

The Rowing Club have had a successful term and their efforts in the "time races" on November 30th were well rewarded. Starting No. 38, our boat finished 32nd out of 41 boats in the race, and a substantial success might therefore be claimed. The Bart's boat was 86 seconds slower than the fastest boat and 60 seconds faster than the slowest.

A matter of special interest to all Bart's men, past and present, is the conferring of an Honorary M.A. on Professor Hopwood by Cambridge University—to Professor Hopwood our heartiest congratulations.*

A.W.

* May we add our warmest congratulations to Professor Hopwood, not only on this latest honour, but also on his Honorary Fellowship at Queens.—Ed.

RUGBY.

v. **Cambridge Civil Service**, on Saturday, November 16th, at home. Result, won, 51 pts. (6 goals and 7 tries) to 0.

The Bart's side maintained their unbeaten record, and at the same time ran the Civil Servants off their feet. The high standard of play makes it difficult to mention names, but Ballantyne was outstanding, scoring six tries, mainly by strong running.

Other scorers were R. F. Jones (2), Corbett, Rimmington, V. H. Jones, Brady, and Bourne. Hunt and Bourne shared the goals.

v. **R.A.F. XV**, on Wednesday, November 27th. Result, Lost 10 pts. to nil.

The Preclinical XV suffered its first defeat of the season at the hands of a strong R.A.F. side. Soon after the start Bart's began a passing movement well inside their own half, but a quick interception by an R.A.F. centre resulted in a try under the posts, the extra points being added. The enemy took full advantage of a following wind to keep the Bart's side bottled up. In the second half Bart's adopted the same tactics but could not quite make the line. Bourne had a good run down the left wing, but was bundled into the corner flag. From a text-book three-quarter movement the R.A.F. scored a second try which was successfully converted. The match was, without doubt, the best of the season, and thoroughly enjoyed by one and all.

Mention might be made here of the XV's points record to date.

Points for—117. Points against—26.

It is hoped to run a regular 2nd XV for the rest of the season, and G. J. Hadfield has been allotted the unenviable job of collecting together the necessary personnel.

M. R. H.

2nd. XV.

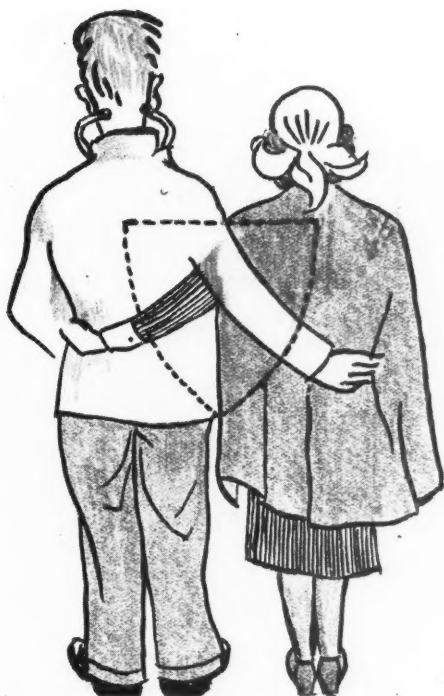
v. **Civil Service 1st XV**, on Saturday, November 23rd, away. Result, Won 6—0 (2 tries).

The newly constituted 2nd XV played their first match against the Civil Service (Cambridge) on Wednesday, November 23rd. The game was rather scrappy. From the start the Bart's forwards were superior and the whole team settled down remarkably quickly. Tries were scored by Middleton and Mathew. Austin, at full back, played a sound game. Of the forwards, A. Jones was outstandingly good. The three-quarter play was ragged but should rapidly improve, as Hudson and Seymour initiated several good movements under considerable difficulty.

G.J.H.

v. **St. John's 2nd XV**, on Saturday, November 30th, away. Result, Lost 3—11 (1 try—2 tries and 1 goal).

The standard of play throughout the game on the whole showed much improvement, and the game was lost to a team which was only superior in training. During the first half the whole team pressed hard; just before half-time, however, after a sudden rush the St. John's three-quarters scored a corner-flag try. In the first part of the second half lack of co-ordination led to two tries by St. John's. Bourne replied by a try for Bart's. All the outsiders played a sound game. The new pack



ARGENT AND SABLE

" . . . Heraldic writers have often read a meaning into the learnings which they describe"

(Sir Norman Moore's *History of St. Bartholomew's Hospital*)

showed signs of improvement. A. Jones initiated some good movements in the loose, and Hadfield's hooking was accurate and very successful.

R.N.A.

v. **R.A.F. 2nd XV**, on Saturday, December 7th, away. Result, Won 14—7 (3 tries and 1 goal—1 try and 1 drop goal).

We were grateful for reinforcements from the 1st XV and to Mr. Lear for kindly filling gaps in the team for this match.

In the first half the play was fairly good and the Bart's forwards showed a superiority in the scrums, although the backs did not make full use of the golden advantages afforded to them by Hadfield's accurate hooking. Although the R.A.F. full back had to leave the field they ran through to score a lucky try before half-time. The beginning of the second half opened badly for Bart's, the R.A.F. dropping an easy goal. The Bart's side rallied after this and the rest of the play was in the R.A.F. half. Brilliant three-quarter movements resulted in tries scored by Lear (2), I. P. Todd and Hunt. Of the forwards, Corbett was outstanding

in the loose, and the backs when they "got going" showed dash and determination.

R.N.A.

ASSOCIATION.

v. **Queen's College**, on November 9th.

In our game with Queens' we were unfortunate to have several of our first team absent; consequently we were rather overrun from the start by the superior side of Queens'. Our defence was weak and our forwards could never get going owing to the strong half-backs opposed to them. We were 4 goals down at half-time, but we played much better football after the change-over.

Adams as centre forward scored a good goal from a pass by Hunt from the right wing. Queens' however, were still on top, and piled on three more goals, making the final score 7—1. We look forward to a return match, when we hope to field our full strength side.

v. **St. John's College**, on November 16th.

We were rather unlucky to lose this game perhaps, as I think we can say we had the better of the play. However, many promising movements failed to produce the goals we sought. The John's

defence was kept very busy and did well to beat off the repeated attacks by our forwards.

At half-time we found ourselves 1 goal down, but soon equalized through d'Arcy Laidlaw, who beat two men and cut in to score a very good goal. After this, the John's halves dominated the game by some very clever intercepting and distribution of the ball. They scored another goal owing to a misunderstanding between our two backs, when the centre forward was allowed to walk the ball into the net. The result was 2-1 in favour of John's, after a very keen game.

L.C.

HOCKEY.

Four of our matches during the month of November were scratched at the last moment by the Cambridge Colleges, the latter being unable to make up full teams. M.B. Examinations are the cause of our failure to beat our opponents in the last two matches.

A London University XI v. Cambridge University. Lost 5-1.

A London University team had been selected from a trial match on the previous Wednesday. It was composed of one from University College, three from London School of Economics, and seven from Bart's; and the team was captained by A. E. Fyfe. Cambridge started straight away and hammered hard at London's defence by swinging the ball very effectively, but in spite of this Cambridge only scored three goals by half-time. In the second half London began to work together

and made the best of any opening which was offered. Johnston scored an excellent goal for London from the back of the circle. Cambridge added two more to their score. London improved so rapidly as the match continued that in the last few minutes they seemed to be attacking most of the time, but Cambridge's defence prevented any further score. Fyfe, Goodbody, Kumar (L.S.E.), and Todd are worthy of a special mention for their excellent performance throughout the match.

v. King's College, home. Lost 3-2.

The Bart's team was not as strong as usual since five players abstained from playing because of M.B. Examinations. King's scored two goals in the first quarter of an hour, but this was soon stopped by Fyfe scoring a goal for Bart's, before half-time. In the second half, King's scored again. Then from the centre bulley that followed Sankey and Todd took the ball straight down the field, the former scoring. Thomson played a magnificent game, and saved many possible goals.

v. London School of Economics, away. Lost 7-3.

L.S.E. started by scoring in the first five minutes; and then, owing to an unfortunate incident, Bart's were left without a goalkeeper for the rest of the match. In spite of this the match was fairly even until the last five minutes, when L.S.E. suddenly got three goals in quick succession. Bart's goals were scored by Johnston (2) and Sankey (1).
R.B.S.



The approach of Christmas is bringing with it increased social activities among the students at Hill End. This may not be entirely due to the festive season, but rather to the fact that the Reception Hall, so long in disuse, is now available for club activities. The first "Prune" took place on October 29th and was very well attended. Old "Stoats" were frolicking around in a manner reminiscent of last spring. Even those in whom we had never suspected activities attributed to such rodents were mopping their brows after thrashing a polka. The prunes are now a weekly feature and will be elaborated at Christmas, and although we have already been visited by some of the more notorious stoats from Bart's, we hope, in the future, to see many more.

The dramatists occupy the hall most nights after their committee meetings in the usual places (see last Hill End News). Intrepid explorers have attempted to inspect further, after seeing a sample of the chorus, only to be repulsed with heavy losses.

The gramophone section now holds concerts twice a week. It is a pity that some intellectuals have to look so piscine whilst enjoying good music. At a conservative estimate, the nursing staff must have produced enough winter woolies during these recitals to equip a regiment.

The chorus, reinforced by a few new male voices, now shake the whole building during their practices. Thanks to the unceasing efforts of Irving, discords are now rarely heard, and we feel confident that their forthcoming show will be a roaring success.

The Stooges of Stooze Hall, now that air-watching has been decentralised, are becoming more sluggish in the relatively early hours. They may be seen emerging from Stooze Hall and groping their way to breakfast in gorgeous dressing-gowns. The ground floor of Stooze Hall now boasts a ping-pong table which is very popular amongst the students.

The 24-hour duty would appear to be proving a bit onerous to some of us. Conditions of duty have been improved a little by moving the mattresses to F.B.1.

The weekly meetings of the Students' Union have not proved a great success judging by the attendance and lack of material for discussion.

Wednesday afternoon still sees the stalwart mixed hockey players rushing up and down, beating the air wildly with their sticks. An occasional shout of pain usually indicates that some nurse's tender skin has been mistaken for the ball. However, reciprocation is not at all unusual—"Wheel him away."

L.S.C.
A.H.W.B.

MATTERS MILITARY.

The difficulties experienced with the formation and equipping of the Local Home Guard Platoon have been no exception to that experienced throughout the country, but, fortunately, these are now a "thing of the past." The energetic work of Sergeant Howe has left no stone unturned (nor any Quartermaster's Stores in H—shire undisturbed) to see that all have uniforms, greatcoats, boots, etc., in addition to rifles, one machine gun, plenty of ammunition and bayonets.

Training at first was chiefly arms drill and tactical exercises. This was followed by some target practice. A nearby range was obtained and some very instructive shoots took place, with good results. Now, since the onset of early black-outs, our training has been restricted. However, talks on Molotov bombs, map-reading, aeroplane spotting and the like, have been interesting and very beneficial.

In addition to this we have our Observation Post to man every night, where our duties are manifold. Location of bombs, outbreaks of fire and evidence of 5th Column activity are subjects which occupy our attention during the long hours of cold winter nights on duty. Cold the nights are indeed, but fortunately our plight has captured the hearts of the ladies, who have been busily engaged knitting balaclavas, scarves, etc., to make our task a little more comfortable.

THE STAGE.

The principal event in the dramatic world at Hill End is undoubtedly the Revue to be produced on January 2nd—4th. It goes under the title of "Black and White" (not sable and argent as some humorist suggested), and is being performed by both nurses and students. This year the object to which the profits will be largely devoted is the Mayor of St. Albans' Fund for evacuation and air-raid distress. We hope we shall get support worthy of this cause!

At the moment rehearsals are proceeding apace amongst vicissitudes of various kinds.

We shall welcome all comers from Bart's to Hill End, and we sincerely hope we shall not disappoint them. H.H.B.

GRAMOPHONE CORRESPONDENT REPENTS.

In the last issue of the Journal the black-out arrangements in the Reception Hall were denounced as extremely inadequate. We wish to take back those hasty words because the situation is undergoing rapid and very satisfactory changes.

Not only are we now able to use the Reception Hall—admittedly with subdued lighting only—for dances and gramophone recitals, but the problem of blacking-out the Hall is now being tackled so efficiently that before long we hope to be able to use it with no restrictions whatever.

A.G.H.

SOCCER.

The soccer team, since losing its opening match v. Camp School Old Boys (2—0), has done fairly well. The match with Hatfield Hospital resulted in a draw (1—1) and v. Cunningham Hill F.C. we won (8—2), Dowling scoring six goals. Oaklands Horticulture College were beaten (1—0), and

the hitherto unbeaten Bart's XI was defeated (3—1). We lost, however, to U.C.H. (4—2).

The Bart's match merits further description. Bart's started off with a rush and, being well led by Ronnie James, rapidly went ahead. The home team, however, fought back and equalised, Dowling scoring. Nash, the Hill End captain, was playing a great game and successfully held up the opposing forwards. Among our own forwards Mr. Kelsey, whose services we had been able to secure for the afternoon, thanks to the kind permission of Mr. Cochran and "The Christmas Show," was prominent. He made what he describes as "several penetrating moves" and cheered the spectators on the touchline by song and dance solos between times. Once or twice, whilst high kicking, he was observed to come into contact with Mr. Bougie Phillips—the South American Gynaecologist—to the latter's obvious discomfort, since he was heard to state after the game that the pitch was much too muddy. Gallimore and Dowling made an excellent Left Wing, and were well supported by Danby at Left Half; the latter scored in the second half after we had drawn ahead through a goal by Gallimore. For the visitors, McShine and Harold in the defence, and James, Birch and Routledge in the attack, were prominent. The return match resulted in a 2—2 draw—James again scoring early in the game, though after that he seemed to spend his time lying flat in the penalty area. Dowling and Nash scored for Hill End. The result was fitting for such a well-fought game.

I should like to thank Dr. Roberts for his help regarding equipment and facilities, Sergeant-Major Alderson for making tea arrangements, and last but not least the Secretary of the Rugger Club (in spite of suspicions as to who smashed the Rugger goal posts), without whose co-operation there would have been many a blitz on the pitch between Soccer and Rugger Clubs in order to decide who was to use it. D.G.L.

HOCKEY.

v. St. Albans, away; won 9—1.

St. Albans fielded rather a scratch side of ten men for this game. In spite of this, however, and aided by a little distracting ribaldry from behind our goal by both our supporters, lemons were taken with the score at 4—2. However, Everson Pearse, who had been a trifle soporific so far, following a committee meeting the previous night, now regained his old form, and simultaneously their centre-forward and their best back retired with knee injuries. The later stages of the game were devoid of interest. Scorers were Bental (4), Bullough (2), Baldwyn, Brenan and Newcombe.

v. 3rd Medium Reserve Regiment R.A.

The Gunners shocked us profoundly by starting at a great pace, and Ellis and Bullough had to work very hard until we settled down. Then our right wing found a weakness and Baldwyn made several splendid runs through, and gradually we asserted ourselves. We eventually amassed seven goals, though we had to play far harder than the score suggests. Those responsible were Bental (2), Brenan (2), Bullough (2) and Manning. The Gunners scored in the last minute.

FRIERN NEWS

Labor, sopor, dolor, stupor.

SPORTS NEWS

R.U.F.C.

The witty pencil of the late and much-lamented PONT is needed to depict the delays and discomforts which now attend the Rugger player in his pursuit of sport. Frantic dashing from railway bars to non-existent trains, irrelevant dialogues with railway officials, cold comfort on dreary platforms only enlivened by the sad story of little Angelina or the militancy of the Salvation Army harmoniously filling the night air—all these led to our growing, and oft-stated, belief that this was no way to run a railway. But it has been well worth while. From a rather sorry beginning the team has improved with every game, and has just won a grand and well-deserved victory over St. Mary's. Details of scoring in the matches mentioned will have been read in the Press by those interested, and one can say here that the interest and support of many more would be a great help and encouragement to the Club in its efforts to maintain a good standard of football and fixtures for that future when war is over. It is not easy, with Bart's so dispersed, to field full sides every Saturday, and the officials deserve our thanks and more co-operation from the players. It is an honour to play for the Hospital, but to some this is not apparent, to judge by the footling excuses offered for their inability to play when selected.

November 2nd. **Oxford University 30, Bart.'s 5,** at Oxford.

This was not a happy game for Bart's in the rain, and the weak and ineffective tackling by our forwards and backs allowed the straight-running Oxford backs to score easily. Our try came from a well-placed diagonal kick by McAfee, followed up by Griffiths. Stephen, a fine player, at scrum-half defended bravely but almost alone.

November 9th. **Cambridge University 26, Bart.'s 4,** at Cambridge.

Bart's were an improved side in this game, and it was only a lack of finish which prevented the score giving a truer picture of the run of the play. Our tackling was much more determined, and it was unfortunate that the latitude extended to the 'Varsity passing by the referee was not given to us. McAfee dropped a very neat goal to get our only score and, though beaten by a better side, we gave them a very good game. Corbett, a pre-clinical at Cambridge, called on to play at the last minute in place of a non-arrival, was about our best forward.

November 23rd. **London Hospital 5, Bart.'s 27,** at Hale End.

This was our first victory and, though not too difficult to achieve, was very encouraging and gave our backs confidence in their ability to score tries if given the ball. To me the importance of the game was in the better understanding shown between the half-backs which, in previous games, had not been too happy. While the Bart's team stood petrified at the sound of a falling bomb the London team, more blasé, ran on to score a well-deserved try.

November 30th. **Guy's 10, Bart.'s 10,** at Honor Oak Park.

This was a really grand game of Rugger played at a cracking pace, with fast open play by both sides. One remembers fine runs by Campbell and John Evans for their tries and McAfee's clever

positioning for his drop. Guy's hooked the ball from nearly every scrum and it shows the good use made of our few opportunities, and the fine defence of our backs, that Guy's made their equalising score only in the last minute of the game. This match saw the welcome return of John Stephens to the pack after an injury in a practice game before the Oxford match.

December 7th. **Aldershot Command 11, Bart.'s 9,** at Aldershot.

We were very disappointed at this result as we were clearly the better side, and played much more enterprising football. Our tries came as the result of well-executed passing and backing-up: whereas the Command's tries were of the scrambling sort, and two were undoubtedly very bad decisions. But this is the luck of the game, and no doubt the disappointment was somewhat softened by the sight of two eggs each for tea.

December 14th. **St. Mary's Hospital 8, Bart.'s 9,** at Teddington.

This was a fine victory. Everyone gave of his best, and the forwards especially covered themselves with glory. It was the first game this season in which we have got our share of the ball from the set scrums. This was due to the re-appearance and hooking of Graham, and it will be a great help if he can play regularly. Bart's went with a bang from the kick-off and Mary's were never allowed to settle down to play their usual game. Soon, after a fine movement in which most of the side handled, John Stephens went over to score near the post; Jackson converted. Play was hard and fast and Craddock, marked ineffectively, scored for Mary's. We attacked again, and scrum followed scrum on the Mary's line. At last a quick pass back from Stephen to McAfee gave him his chance to score with a fine drop-kick. Mary's made every effort to win the game in the second half, and McRae was an ever-present menace, but our tackling was grand and our forwards rushed the ball from our lines like an armoured division. A grand run through the middle by John Evans ended just too soon, and good kicking by Stephen and McAfee now kept Mary's on the defensive. Just before the end Mary's, after a forward scramble at one corner of our line, got the ball out quickly and across their line to Campbell, who had come up from full-back, and he scored for McRae to convert. So a fine game ended with Bart's returning to the attack.

R. L. Hall has every reason to be pleased with the improvement of his team. He himself has set a fine example in every game and has been splendidly backed up both on and off the field by the Secretary John Stephens.

Barclay, Alcock and Sandiford are playing really well and seem to go harder every game. West and Moffat are just as keen and are a welcome addition to the side.

Both backs and forwards now have confidence in each other's ability to play their full share in the game and I need not say what a happy condition this is.

I hope that players will make every effort to play regularly and defer social visits and holidays to other times.

"A" XV RUGGER

The results of the "A" XV so far have been disappointing. Of seven games played, five have been lost and only two won. Several factors have contributed their part in this unfortunate state of affairs.

First of all, the Team took a long time to settle down. In this they are not alone for the 1st XV have only recently found their true form. It is, though, a pity that such a state of affairs exists. It is a disease which is very apt to become chronic and almost incurable. This has not yet happened. The "A" XV shows every sign of settling down and continuing the season with better success. This improvement, however, can only be continued with the help and co-operation of the players themselves, which brings us to our next point.

The "A" XV has never put the same team on the field on any consecutive Saturday. The reasons are obvious. The 1st XV has occasionally made claims on its numbers. Too often, though, regular members scratch off with a cheery V.S. Granted, it is not expected that everyone should play every Saturday, forgoing all other engagements; but when a habit is made of it, it is a different matter. Is it a lack of keenness or a complete indifference to the game? A man who really wants to play for his hospital should put this fact before all others and turn out regularly. If this did happen and the "A" XV put the same side on the field for a few consecutive Saturdays, it would rank among the better "A" XV's in London—if not the best.

Let us then hope to see in the New Year a representative side playing and not what amounts to a scratch side.

Lately there have been several scratched fixtures which does no side any good. These have been due to some unfortunate misunderstandings, and in one instance to the failure of a certain visiting side to turn up. These misfortunes are bound to occur in War-Time Rugger, and should be taken in the best spirit. Everyone should realise that occasionally something happens to prevent a game being played, be it due to an act of God or the enemy. It is a pity that this should have happened on three out of the last four Saturdays, and I hope it will not happen again.

Now may I issue an appeal to all players and all interested in the Rugger Club.

To the players—If you want to play, do your bit and help the secretaries. "Cross off" early in the week, and don't grumble if everything is not to your liking. The secretaries have a harder job than you may realise to get you your Rugger. Please help them all you can. Any suggestions you may have will be welcomed. Let us then see some of the old spirit of the Club come back. More keenness, mid-week training and a real desire to put the Club back amongst the foremost in the country, where it properly belongs.

To the Supporters—A little encouragement from the right quarter goes a long way in helping the teams along. Let us have again that support you gave so generously in pre-war days. The 1st XV deserve it. They have produced a first-class side well worth watching. The "A" XV want it. Let them feel their efforts are appreciated. There are now, alas, no spectacular individual players but there are many sound players who can together produce at least two good sides. What they lack in individualism they amply make up as a team.

J. A. ROBERTSON.

"A" XV. RESULTS.

Sept. 28th., 1940. v. Wasps II. Lost 29—0.

The Wasps, having no first XV fixture, turned out a powerful side against which we made a creditable performance. They were, however, too good for us.

Oct. 5th. v. De Havillands. Lost 12—0.

Oct. 12th. v. G. Division Police. Lost 5—0.

A hard fought game between even sides. The Police scored their goal towards the end of the game after pressing hard for some minutes.

Oct. 19th. v. R.A.P.C. Won 14—3.

A good game in which the team played like demons and quite surprised their opponents.

Oct. 26th. v. 1st Batt. Scots. Guards.

Lost 6—3.

This was the "A" XV's most creditable performance. Only 13 men turned up and took the field against a heavy Guards side. Here was the awakening of the "A" XV. There were seven forwards and only three threequarters. Although every one without exception played very well. The credit must go to the magnificent defence of the backs. Norman Campbell was the man of the day. He was everywhere, often marking three men and seizing every opportunity to turn defence into attack. He scored our only try by a magnificent dribble from their 25 line. The kick failed.

The forwards, outnumbered and outweighed, gave the Guards rather more than they bargained for. Their success in the loose made up for all they lost in the tight scrums. Thirteen men played as fifteen and as a team. A glorious defeat.

TEAM—Picton; Morse, Holtby, N. A. Campbell; Merryfield, I. P. M. MacDougall; P. G. Jeffries, R. G. Rees, Castledene, J. A. Robertson, J. A. T. West, J. C. Macauley, G. Richards.

Nov. 2nd. v. Metropolitan Police II. Lost 20—0.

The score hardly does justice to the game. There was always the feeling that given another day, the same team could have beaten the police. Now and again Bart's really played together and were dangerous, but they lacked that final finishing effort. Too often the Police broke away—and scored. If only this side could have played together the score would have been very different.

TEAM—J. D. Loughborough; R. Heyland, Calderwood, Holtby, Morse; Merryfield, Baron; Dr. A. J. H. Spafford, R. G. Rees, J. F. Pearce, J. A. T. West, Wigglesworth, J. C. Macauley, Dr. J. Gaak, P. Borrie.

Nov. 23rd. v. London Hospital II. Won 12—5.

A victory Bart's richly deserved. Here was a team at last. The threequarters played well throughout and at times were inspired. The forwards at times were rather hustled but played well together and gave the threequarters plenty of scope. J. P. Stephens, resting an injured shoulder, played full back and it speaks well of the side that he had little to do. Bartlett, Allardyce and Merryfield kept their opponents puzzled and many a good movement was only spoilt by a forward pass to the rather over keen wings.

Tries were scored by Bartlett, Stephens, Robertson and Allardyce. All the kicks failed.

TEAM—J. P. Stephens; R. Heyland, Allardyce, Merryfield, Morse; D. Bartlett,

I. P. M. MacDougall; J. F. Pearce,
R. G. Rees, A. W. Anderson, J. A.
Robertson, G. Richards, G. Beck, Mann,
P. Rowntree

J. A. R.

A.F.C.

v. Hill End. December 4th, at Hill End.

The return game with Hill End was played on a hard ground and in good weather conditions. Bart's had the advantage of a strong wind in the opening half but through bad finishing were only two goals ahead at half-time, both goals being scored by James. In the second half, against the wind, the Hospital side showed more cohesion, and against the run of play, the home side scored twice and we were unlucky to draw. The second Hill End goal resulted from a penalty. Although well marked James played well, and Harold and Philips were sound in defence. A feature of the game was the duel between Dowling and the Hospital defence.

TEAM—G. H. Wells-Cole; A. D. McShine, A. H. Phillips; G. R. Evans, J. T. Harold, A. Maples; R. F. Kingston, R. T. Routledge, A. R. James, D. J. Robertson, J. Birch.

v. St. Thomas' Hospital. December 7th at Godalming.

This was a morning fixture and involved leaving the hospital at 8 a.m. Despite this, the Hospital side managed to inflict a 5—0 defeat on the home side. Though there was a strong wind and the ground was very hard, the forwards played well together and used the ball to the best advantage. The halves supported them well, and Harold scored an excellent goal, the others being scored by Kingston and James (3), two of the latter resulting from typical dashes.

TEAM—G. H. Wells-Cole; A. D. McShine, F. H. Packer; A. L. Thrower, J. T. Harold, A. H. Phillips; R. F. Kingston, R. T. Routledge, A. R. James, D. J. Robertson, J. Birch.

v. Bromley County School at Chislehurst, December 11th.

This must surely have been one of our most enjoyable games to date. The boys, hardened by many games against Service sides, ran rings round the Hospital side throughout the first half, and only Wells-Cole's excellent goal-keeping and Harland's marking of their clever inside right, prevented them from scoring. In the second half, with the wind in their favour, they scored early. With only about 20 minutes left, Bart's began to play more as a team, and Packer joined in the attack to score an excellent goal, following a solo effort. Soon after, James, with a neat header, deflected another shot from Packer into the net. With Bart's still attacking, the game ended, 2—1, in our favour. However, we were rather fortunate to win, and a draw would have been a better result.

TEAM—G. H. Wells-Cole; A. D. McShine, A. H. Phillips; G. R. Holtby, F. H. Packer, D. Harland; R. F. Kingston, R. T. Routledge, A. R. James, D. J. Robertson, J. Birch.

D. J. R.

HOCKEY CLUB.

v. Blackheath on December 7th, at Chislehurst. Won 3—1.

TEAM—G. E. Hicks; R. S. E. Brewerton, R. E. Ellis; N. Pitt, D. Currie, M. Saunders; S. R. Hewitt, K. O. Harrison, J. L. Fison, T. M. C. Roberts, T. N. Fison.

After a previous day of great heartsearchings, the hockey club arrived in full force and produced 12 players and a referee!! It was a fine sunny afternoon, and our opponents arrived in good time. The Hospital settled down well and soon were attacking strongly, but were unable to score. During the first half the play was very even; occasionally each side broke away, but good goal-keeping prevented any score. Soon after half-time Blackheath scored a good goal, but the Hospital soon replied with a goal by J. L. Fison. Blackheath attacked strongly to force a short corner, but the Hospital cleared well and took the play into their half and scored twice in quick succession, by K. O. Harrison and J. L. Fison. The Hospital won 3—1 after an excellent game.

v. United Banks on November 30th. Draw 3—3.

TEAM—D. T. R. Evans; W. O. Attlee, R. S. E. Brewerton, S. R. Hewitt; D. Currie, G. A. Binns; P. G. Hill, K. O. Harrison, J. L. Fison, T. M. C. Roberts, T. N. Fison.

Adolf must have known that we were going to play on the ——— ground because he dropped two bombs around the pitch on the previous night! The game was played on an excellent ground in very frosty conditions. The Hospital scored first by a goal by K. O. Harrison; the play was kept in our opponents' half, but no score resulted in spite of some penalty corners. The United Banks then began to settle down and scored with a good shot. At half-time the Hospital was leading 2—1. In the second half our opponents attacked strongly and were unlucky not to score. Our forwards broke away to score another goal by J. L. Fison; the Banks retaliated and scored twice in quick succession. The fog made play difficult towards the end of the game and the result was a 3—3 draw. After a good tea and light liquid refreshment the team began their return journey in the fog and black-out. In spite of trams and road barriers which loomed unpleasantly close on a few occasions, our führers managed to drive us home without loss of life or limb.

v. R.A.P.C. on November 16th, at Sidcup. Won 14—0.

TEAM—R. S. E. Brewerton; G. Wells-Cole, M. Lunn; R. B. Saunders, D. Currie, N. Campbell; J. S. Phillips, T. N. Fison, J. L. Fison, K. O. Harrison, J. V. T. Harold.

After a week's heavy rain the state of the ground was not too good, and in places *aqua natura* was very conspicuous. However, the Hospital started to attack strongly and soon had scored some goals. For the best part of the game the Hospital were on the offensive and adequately prevented our opponents from having any chance to score. Our goals were shared by J. L. Fison (7), K. O. Harrison (4), and one each from G. Wells-Cole, R. Brewerton, and T. N. Fison. From time to time our soccer experts treated us to a fine exposition of fly-kicking, but this was generally disallowed by

the referee. Other members of our side were unable to curb their desire for splashing and floundering about in the natural pools of water! After a good tea served by the A.T.S. we returned to Town.

v. **St. Mary's Hospital** at Chislehurst on November 23rd. Lost 3—5.

TEAM—G. E. Hicks; R. S. E. Brewerton, W. O. Attlee, R. B. Saunders; D. Currie, K. O. Harrison; T. N. Fison, H. H. Bentall, J. L. Fison, S. R. Hewitt, T. M. Davies.

The first home match of the season was played at Chislehurst in ideal weather. The ground was in very good condition, and there was surprisingly little shrapnel on it. The pavilion showed remarkably few signs of having been hit by ; Mr.

and Mrs. White seemed to be very well and certainly provided an excellent tea for us.

The game was very fast and Bart's started well and soon scored through J. L. Fison; our forwards still maintained their attack and further goals were added by S. R. Hewitt and T. N. Fison. St. Mary's Hospital rallied and for a time the play was mostly in our half; our opponents scored a goal from a short corner just before half-time. In the second half our play was not quite so crisp or accurate. The Mary's forwards began to settle down very well and, helped by some penalty corners and somewhat indifferent play by Bart's, scored four goals in quick succession. Bart's then broke away and were unlucky not to score. No-side came with a 3—5 win for St. Mary's Hospital.

NEW BOOKS

The Philosophy of Plato: Raphaël Demos.

(Charles Scribner's Sons, Ltd., 12/6.)

Philosophical themes, said l'Abbé Prévost, form the most frequent topics of thought and conversation of men above a certain intellectual level; the pleasantest hours of a man's life are those spent in such philosophical activity. The educated class of the eighteenth century read widely in contemporary and the older philosophies and dialectics brought their own reward. Today, the first half of Prévost's dictum seems still to be true; yet how can hours of philosophising result in anything but futility when the casual philosopher has no real knowledge of the scope and method of philosophy, when he cannot apply even the elements of logic to his process of reasoning and when he himself is not prepared to believe the truth of the conclusions at which he arrives? It is no longer the custom for educated men to read and consider the written work of past philosophers; written philosophy, they say, is nebulous, unpractical and tedious and they have no time to spend—as they suppose—so unprofitably. For these the philosophy of Plato can provide an answer. It was characteristic of the Greek schools that their philosophy could be applied to everyday life; particularly true was this of Platonism. The philosophy of Plato is not merely nebulous: it is practical, even today, and this Professor Demos

has adequately demonstrated by applying Platonic theory to contemporary examples. The reading of the complete series of Platonic dialogues would, it is true, demand a considerable amount of time and this would be increased by the need for understanding and correlation of apparently opposed lines of argument from different dialogues. Professor Demos has removed these difficulties. Relevant extracts from all the dialogues are summarized and grouped together in the light of an interpretation whose validity is borne out by a new lack of contradiction in almost every case—in the few remaining instances it is Plato's own writing which is obscure and leaves room for an apparent contradiction. Throughout the whole book runs a delightful vein of Plato's humour, Socratic irony, and many of the celebrated analogies are included. It is indisputable that Professor Demos is the master of his subject; it would be presumptuous to criticise his understanding of the dialogues. He has achieved so concise and coherent a survey of the philosophy of Plato that it is ardently to be hoped that the amateur philosopher may take advantage of it as a guide to logical thinking and as an encouragement to believe the truths which he discovers for himself. And so may Prévost's *moments les plus doux* of the eighteenth century not be wholly lost to the twentieth.

BIRTHS

- SUTTON.—On Wednesday, November 20th, 1940, at Fulmer Chase, Fulmer, Bucks, to Nancy (née Mitton), wife of Surg. Lieut.-Commander R. J. C. Sutton, R.N.V.R.—a daughter.
CHRISTIE.—On November 7th, 1940, at Tuxedo Park, New York, U.S.A., to Joyce, wife of Professor Ronald Christie—a son.
MORE NISBETT.—On December 4th, 1940, at Maycroft, Barnards Green Road, Malvern, to Sheila, wife of Surgeon Lieut.-Commander J. G. More Nisbett, R.N.—a son.

DEATHS

- BUSHE.—On November 16th, 1940, at Allanbank, Newton Abbot, suddenly, after a short illness, Erasmus Bushe, M.R.C.S., L.R.C.P., aged 88 years.
BOX.—On November 27th, 1940, at Scaynes Hill, Sussex, Stanley Longhurst Box, M.D., dearly loved husband of Mary and father of Hubert, aged 68 years.

RAMSAY.—On October 25th, 1940, Jeffrey Ramsay, O.B.E., M.D. F.R.C.P. aged 56, dearly loved husband of Alice Ramsay, died suddenly at his home, Tinkerfield, Dutton, Longridge, Near Preston, Lancashire.

SCHOLBERG.—On October 14th, at Southgate, Lisvane, Cardiff, Harold Alfred Scholberg, M.B., D.P.H., dear husband of Anne and second son of the late P. N. Scholberg, British Vice-Consul, Taital, Chile.

CHANGE OF ADDRESS

Changes of Address will only be printed in the Journal if a specific request to this effect is sent with the new address. Requests from non-subscribers must also be accompanied by payment (2d. per word).

MAJOR JOHN N. GROVES, R.A.M.C., 11, Charmouth Road, St. Albans, Herts.

Primary Fellowship Course

There will be a Primary Fellowship Course for the May examination held jointly with the Teachers of the London Hospital Medical College and carried out at Cambridge. It will start on February 24th

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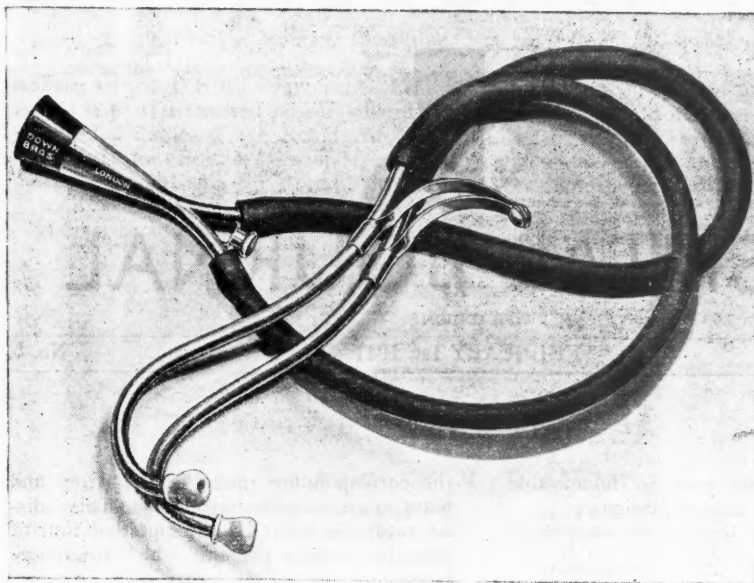
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